

WHAT IS CLAIMED IS:

1. An indexable wear plate/piercing tip insert configured to be attached at a front, nose portion of a correspondingly configured movable jaw of a metal demolition shears, the wear plate/piercing tip insert comprising:

a metal body having a central region and two ends, and

a metal tip portion disposed at each of said two ends, each said tip portion protruding laterally with respect to said central region in the direction of a first side of said body so as to define a piercing tip that extends at least partially across the width of the front, nose portion of the movable jaw when the wear plate/piercing tip insert is attached to the movable jaw;

wherein a second side of said body that is opposite to said first side has a generally planar surface to define a wear surface of said wear plate/piercing tip insert;

wherein each said tip portion has a shearing edge on said second side of said body and a piercing edge disposed at an angle relative to and intersecting with said shearing edge, said piercing edge extending at least partially across the width of the front, nose portion of the movable jaw when the wear plate/piercing tip insert is attached to the movable jaw; and

wherein the geometric configuration of said wear plate/piercing tip insert is essentially the same in a first position and a second position, said second position being a position in which said wear plate/piercing tip insert is rotated about a pivot axis passing centrally through said wear plate/piercing tip insert, normal to said generally planar surface;

whereby a non-worn or less worn portion of said wear surface and non-worn or less worn shearing and piercing edges can be presented simultaneously for the metal demolition shear by rotating said wear plate/piercing tip insert about said pivot axis from said first position to said second position and reseating said wear plate/piercing tip insert on the movable jaw.

2. The wear plate/piercing tip insert of claim 1, wherein said second position is a position in which the wear plate/piercing tip insert is rotated by 180° about said pivot axis.

3. The wear plate/piercing tip insert of claim 1, wherein the shearing edge of each tip portion is coplanar with and forms an edge of said generally planar surface.

4. The wear plate/piercing tip insert of claim 1, further comprising at least one boss or dowel that is located between said metal tip portions and that extends laterally from said central region in the direction of the first side of said body.

5. A metal demolition shears, comprising:

a fixed jaw having a fixed blade member with a first cutting/shearing edge extending therealong and a guide member spaced from and extending in generally parallel relation to said fixed blade member;

a movable jaw with a second cutting/shearing edge extending therealong and that pivots relative to said fixed jaw; and

an indexable wear plate/piercing tip insert that is attached at a front, nose portion of said movable jaw, the wear plate/piercing tip insert comprising

a metal body having a central region and two ends and a metal tip portion disposed at each of said two ends, each said tip portion protruding laterally with respect to said central region in the direction of a first side of said body so as to define an integral piercing tip that extends at least partially across the width of the front, nose portion of the movable jaw;

wherein a second side of said body that is opposite to said first side has a generally planar surface to define a wear surface of said wear plate/piercing tip insert;

wherein each said tip portion has a shearing edge on said second side of said body and a piercing edge disposed at an angle relative to and intersecting with said shearing edge, said piercing edge extending at least partially across the width of the front, nose portion of the movable blade member; and

wherein the geometric configuration of said wear plate/piercing tip insert is essentially the same in a first position and a second position, said second position being a position in which said wear plate/piercing tip insert is rotated about a pivot axis passing centrally through said wear plate/piercing tip insert, normal to said generally planar surface;

whereby a non-worn or less worn portion of said wear surface and non-worn or less worn shearing and piercing edges can be presented simultaneously for said metal demolition shear by rotating said wear plate/piercing tip insert about said pivot axis from said first position to said second position and reseating said insert on said movable blade member.

6. The metal demolition shears of claim 5, wherein said second position is a position in which the wear plate/piercing tip insert is rotated by 180° about said pivot axis.

7. The metal demolition shears of claim 5, wherein the front, nose portion of the movable jaw member has a pocket or cavity extending laterally inwardly from a surface thereof into which the tip portions of the wear plate/piercing tip insert each fit, one of the tip portions being fitted in said pocket or cavity when positioned in a non-operative position.

8. The metal demolition shears of claim 7, wherein the pocket or cavity has contours that match surface contours of the tip portions.

9. The metal demolition shears of claim 5, wherein the front, nose portion of the movable jaw member has a notch formed in an underside thereof, the notch having surface contours that match surface contours of each of the tip portions, wherein one of the tip portions that is positioned in an operative position engages with said notch.

10. The metal demolition shears of claim 5, wherein said wear plate/piercing tip insert further comprises at least one boss or dowel that is located between said metal tip portions and that extends laterally from said central region in the direction of the first side of said body and wherein the front, nose portion of the movable jaw has a depression extending laterally inwardly from a surface thereof that matches surface contours of said at least one boss or dowel, said at least one boss or dowel fitting within said depression.

11. The metal demolition shears of claim 5, wherein the second cutting/shearing edge is provided by at least one blade insert member.

12. The metal demolition shears of claim 11, wherein the blade insert member extends all the way to a forwardmost portion of the front, nose portion of the movable jaw and wherein an inner-facing surface of one of the tip portions that is in an operative position engages with an inner-facing surface of the blade insert.

13. The metal demolition shears of claim 12, wherein forward-facing surfaces of the tip portion in the operative position and the blade insert are co-planar and bottom-facing surfaces of the tip portion in the operative position and the blade insert are co-planar such that a forward portion of the blade insert and a forward, lower portion of the tip portion in the operative position together define a piercing tip portion of the movable jaw.

14. A jaw member for use in a metal demolition shears, said jaw member comprising:

a jaw body with a cutting/shearing edge extending therealong; and

an indexable wear plate/piercing tip insert that is attached at a front, nose portion of said jaw body, the wear plate/piercing tip insert comprising a metal insert body having a central region and two ends and a metal tip portion disposed at each of said two ends, each said tip portion protruding laterally with respect to said central region in the direction of a first side of said insert body so as to define an integral piercing tip that extends at least partially across the width of the front, nose portion of the jaw body;

wherein a second side of said insert body that is opposite to said first side has a generally planar surface to define a wear surface of said wear plate/piercing tip insert;

wherein each said tip portion has a shearing edge on said second side of said insert body and a piercing edge disposed at an angle relative to and intersecting with said shearing edge, said piercing edge extending at least partially across the width of the front, nose portion of the jaw body; and

wherein the geometric configuration of said wear plate/piercing tip insert is essentially the same in a first position and a second position, said second position being a position in which said wear plate/piercing tip insert is rotated about a pivot axis passing centrally through said wear plate/piercing tip insert, normal to said generally planar surface;

whereby a non-worn or less worn portion of said wear surface and non-worn or less worn shearing and piercing edges can be presented simultaneously for the metal demolition shear by rotating said wear plate/piercing tip insert about said pivot axis from said first position to said second position and reseating said insert on said movable blade member.

15. The jaw member of claim 14, wherein said second position is a position in which the wear plate/piercing tip insert is rotated by 180° about said pivot axis.

16. The jaw member of claim 14, wherein the front, nose portion of the jaw body has a pocket or cavity extending laterally inwardly from a surface thereof into which the tip portions of the wear plate/piercing tip insert each fit, one of the tip portions being fitted in said pocket or cavity when positioned in a non-operative position.

17. The jaw member of claim 16, wherein the pocket or cavity has contours that match surface contours of the tip portions.

18. The jaw member of claim 14, wherein the front, nose portion of the jaw member has a notch formed in an underside thereof, the notch having surface contours that match surface contours of the tip portions, wherein one of the tip portions that is positioned in an operative position engages with said notch.

19. The jaw member of claim 14, wherein said wear plate/piercing tip insert further comprises a boss that is located between said metal tip portions and that extends laterally from said central region in the direction of the first side of said body and wherein the front, nose portion of said jaw member has a depression extending laterally inwardly from a surface thereof that matches surface contours of said boss, said boss fitting within said depression.

20. The jaw member of claim 14, wherein the cutting/shearing edge is provided by at least one blade insert member.

21. The jaw member of claim 20, wherein the blade insert member extends all the way to a forwardmost portion of the front, nose portion of the jaw member and wherein an inner-facing surface of one of the tip portions that is in an operative position engages with an inner-facing surface of the blade insert.

22. The jaw member of claim 21, wherein forward-facing surfaces of the tip portion in the operative position and the blade insert are co-planar and bottom-facing surfaces of the tip portion in the operative position and the blade insert are co-planar such that a forward portion of the blade insert and a forward, lower portion of the tip portion in the operative position together define a piercing tip portion of the jaw member.

23. A jaw member for use in a metal demolition shears, said jaw member comprising:

a jaw body with a cutting/shearing edge extending therealong;

a recessed seating surface at a forward, nose portion of said jaw body;

a pocket or cavity that extends laterally from said recessed seating surface toward an opposite side of said jaw body, and

a cut-out or notch formed at a lower, underside portion of said forward, nose portion of said jaw body;

wherein said cut-out or notch has contours that are the same as a portion of contours of said pocket or cavity and wherein said recessed seating surface has a geometric configuration which permits an insert member to be seated thereagainst in multiple positions, with one laterally protruding tip portion of the insert member seating within said pocket or cavity and another, generally identically configured, laterally protruding tip portion of the insert member engaging against surfaces of said cut-out or notch in each of said multiple positions.

24. The jaw member of claim 23, further comprising at least one bore or depression, other than said pocket or cavity, extending laterally from said recessed seating surface and configured to receive therein a support boss extending laterally from the insert member or a support dowel.

25. The jaw member of claim 23, wherein said cut-out or notch extends laterally across the entire width of said forward, nose portion of the jaw body.